

Su b91

What is claimed is:

1. A cleaning method of treatment equipment, comprising:

a step of, while supplying a cleaning gas containing a substance directly complexing prescribed metal in a treatment chamber of the treatment equipment that treats a substrate, exhausting the cleaning gas from the treatment chamber.

2. The cleaning method of claim 1:

wherein the substance of directly complexing is carboxylic acid or a derivative of carboxylic acid.

10 3. The cleaning method of claim 2:

wherein the carboxylic acid or the derivative of carboxylic acid is a substance expressed by the following equations: RCOOH, RCOOR', or R(COOH)_n (R, R' are hydrocarbon group capable of containing halogen atom, n being an integer).

15 4. The cleaning method of claim 3:

wherein the substance for directly complexing is trifluoroacetic acid.

5. The cleaning method of claim 1:

wherein the treatment equipment is film formation equipment.

20 6. The cleaning method of claim 1:

wherein the prescribed metal is copper.

7. The cleaning method of claim 1:

wherein the cleaning gas contains an additive that promotes complexing of the prescribed metal.

25 8. The cleaning method of claim 1:

wherein the additive is water vapor.

9. A cleaning method of treatment equipment, comprising

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the steps of:

supplying, in a treatment chamber of treatment equipment treating a substrate, a cleaning gas containing a substance directly complexing prescribed metal; and
exhausting the cleaning gas from the treatment chamber.

10. The cleaning method of claim 9:

wherein the steps of supplying the cleaning gas and of exhausting the cleaning gas are alternately repeated.

11. Treatment equipment, comprising:

10 a treatment chamber for treating a substrate;
a susceptor disposed in the treatment chamber and on which the substrate is disposed;
a treatment gas supply system for supplying, in the treatment chamber, a treatment gas containing copper as a
15 component;
an evacuation system for evacuating the inside of the treatment chamber; and
a TFA supply system for supplying trifluoroacetic acid in the treatment chamber.

20 12. The treatment equipment of claim 11:

wherein the treatment gas supply system comprises a treatment agent tank, treatment gas supply piping connecting the treatment chamber and the treatment agent tank and a treatment agent vaporizer disposed in the middle of the treatment gas supply
25 piping;

wherein the TFA supply system comprises a TFA tank and a TFA supply piping connecting the TFA tank and the treatment gas supply piping, the treatment gas supply piping being downstream

the treatment agent vaporizer in a direction of treatment gas movement.

13. The treatment equipment of claim 12:

wherein at least in a portion downstream the vaporizer of
5 the treatment agent supply piping a heater is disposed.

14. The treatment equipment of claim 13:

wherein the treatment chamber is furnished with a heater
to heat a wall surface of the treatment chamber.

15. The treatment equipment of claim 12:

10 wherein the treatment agent tank is a tank containing a
treatment agent containing copper as a component.

16. The treatment equipment of claim 11, further
comprising:

a supply system for supplying an additive that promotes
15 complexing of copper.